(b) DOL will select the site producing the highest estimate for probability of causation to adjudicate the claim.

§ 81.24 Guidelines for leukemia.

(a) For claims involving leukemia, DOL will calculate one or more probability of causation estimates from up to three of the four alternate leukemia risk models included in NIOSH-IREP, as specified in the NIOSH-IREP Operating Guide. These include: "Leukemia, all types except CLL" (IDC–9 codes: 204–208, except 204.1), "acute lymphocytic leukemia" (ICD–9 code: 204.0), and "acute myelogenous leukemia" (ICD–9 code: 205.0).

(b) For leukemia claims in which DOL calculates multiple probability of causation estimates, as specified in the NIOSH-IREP Operating Guide, the probability of causation estimate DOL assigns to the claim will be based on the leukemia risk model producing the highest estimate for probability of causation.

§ 81.25 Guidelines for claims including two or more primary cancers.

For claims including two or more primary cancers, DOL will use NIOSH-IREP to calculate the estimated probability of causation for each cancer individually. Then DOL will perform the following calculation using the probability of causation estimates produced by NIOSH-IREP:

EQUATION 1

Calculate: $1 - [\{1 - PC_1\} \times \{1 - PC_2\} \times \ldots \times \{1 - PC_n\}] = PC_{total}$,

where PC_1 is the probability of causation for one of the primary cancers identified in the claim, PC_2 is the probability of causation for a second primary cancer identified in the claim, and PC_n is the probability of causation for the nth primary cancer identified in the claim. PC_{total} is the probability that at least one of the primary cancers (cancers 1 through "n") was caused by the radiation dose estimated for the claim when Equation 1 is evaluated based on the joint distribution of $PC_1, \ldots, PC_n$.[4] DOL will use the probability of causation value calculated for PC_{total} to adjudicate the claim.

[67 FR 22309, May 2, 2002; 67 FR 62096, Oct. 3, 2002]

§ 81.30 Non-radiogenic cancers.

The following cancers are considered non-radiogenic for the purposes of EEOICPA and this part. DOL will assign a probability of causation of zero to the following cancers:

(a) Chronic lymphocytic leukemia (ICD–9 code: 204.1)

(b) [Reserved]

APPENDIX A TO PART 81—GLOSSARY OF ICD–9 CODES AND THEIR CANCER DESCRIPTIONS[1]

ICD–9 code	Cancer description
140	Malignant neoplasm of lip.
141	Malignant neoplasm of tongue.
142	Malignant neoplasm of major salivary glands.
143	Malignant neoplasm of gum.
144	Malignant neoplasm of floor of mouth.
145	Malignant neoplasm of other and unspecified parts of mouth.
146	Malignant neoplasm of oropharynx.
147	Malignant neoplasm of nasopharynx.
148	Malignant neoplasm of hypopharynx.
149	Malignant neoplasm of other and ill-defined sites within the lip, oral cavity, and pharynx.
150	Malignant neoplasm of esophagus.
151	Malignant neoplasm of stomach.
152	Malignant neoplasm of small intestine, including duodenum.
153	Malignant neoplasm of colon.

[4] Evaluating Equation 1 based on the individual upper 99th percentiles of $PC_1, \ldots, PC_n$ approximates the upper 99th percentile of PC_{total} whenever $PC_1, \ldots, PC_n$ are highly related, e.g., when a common dose-reconstruction is the only non-negligible source of uncertainty in the individual PC_i's. However, this approximation can overestimate it if other sources of uncertainty contribute independently to the $PC_1, \ldots, PC_n$, whereas treating the joint distribution as fully independent could substantially underestimate the upper 99th percentile of PC_{total} whenever the individual PC_i's are positively correlated.